National Oceanic and Atmospheric Administration National Weather Service National Weather Service Dissemination Systems (NDS)

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Annual Operational Analysis – 2006

1.0 Strategic and Business Results

This Annual Operational Analysis (AOA) report provides an assessment of the NDS program's performance for calendar year 2006 and its contributions to achieving the NWS' strategic goals. This investment continues to meet established cost, schedule and performance parameters and must continue in order for NOAA to meet its Strategic Goals of Serving Society's Needs for Weather and Water; and Supporting the Nation's Commerce with Information for Safe, Efficient, and Environmentally Sound Transportation.

2.0 System Performance

The steady-state portion of the NDS program includes operations and maintenance (O&M) costs for the NOAA Weather Wire Service (NWWS), the International Satellite Communications System (ISCS), and the NOAA Weather Radio (NWR). This analysis provides an assessment of the NDS program's performance for calendar year 2006. The investment continues to meet established cost, schedule and performance parameters and must continue in order for NOAA to meet its Strategic Goals of Serving Society's Needs for Weather and Water; and Supporting the Nation's Commerce with Information for Safe, Efficient, and Environmentally Sound Transportation.

Performance of the NDS investment for 2006 is shown in the table below:

Measurement Area	Measurement Indicator	2006 Baseline	Planned Improvement to Baseline	Through September 30, 2006
Mission and Business Results	NWR broadcast coverage for areas at high risk of severe weather	93% of areas covered	97% or areas covered (add 9 new stations)	96% or areas covered (only 6 installed)
Customer Results	ISCS network availability	99% network availability	None – maintain steady state baseline	99.8% network availability
Process and Activities	NWWS warnings throughput	Throughput of warnings 10 seconds or less 98% of the time	None – maintain steady state baseline	Throughput of warnings 8.97 seconds or less 98% of the time
Technology	Percent of old NWR transmitters refurbished	0% of old transmitters refurbished	15% of old transmitters refurbished	Transmitters procured for 15% of old transmitters

All systems were exceeding their current performance measures shown above with the exception of the NWR transmitter expansion to the nine high risk sites. Only six of the nine transmitters were installed by the end of FY06. One of nine planned high risk installations was completed in July 2006. Five additional high risk installations were completed the last week of September 2006 for a total of six. The remaining three installations were completed in November 2006. The delay was due to a shortage of transmitters and delays in negotiating and establishing transmitter site leases.

3.0 Financial Performance

The purpose of the NDS funding is to pay on-going O&M costs for contract support, communications, electric utilities, maintenance, repair and logistics support with the goal of achieving a minimum performance measures shown above. The established cost baseline for this performance is an annual, recurring funding level of \$14.66M. In FY06, the O&M funding level for these projects was \$14.66M. This funding level provided for the achievement of the performance described above, including the three NWR installations in November 2006.

4.0 Customer Results

The NDS program is fully meeting the needs of a wide range of customers. The NWR network provides advisories and warnings of severe weather to over 95% of the US public. In many areas of the country the local emergency managers have agreements with the Weather Forecast Offices to broadcast civil emergency messages and non-weather emergency messages on the NWR network as an additional method of providing the public emergency information. NWR is one of the most efficient and cost-effective methods of disseminating severe weather watches and warnings, flash flood warnings, and other NWS products and services to the general public and all levels of government emergency managers. It is also the only NWS dissemination system capable of reaching individual citizens at nominal cost to citizen (individual purchase of NOAA weather radio) and is the only system the Federal Communications Commission mandates that broadcast media outlets monitor as a source of public safety announcements. NWWS provides the fastest means of broadcasting severe weather warnings to federal, state and local emergency managers; media; and other private sector subscribers. ISCS broadcasts weather information to over 80 countries in the Atlantic and Pacific basins. ISCS provides key information for aviation and supports the data communication requirements of the World Meteorological Organization's Region IV for which the U.S. is the central communications hub.

5.0 Innovation

The mission of the Office of Operational Systems (OOS) is to provide cost effective operations and maintenance support for NWS systems in support of our customers. OOS routinely explores alternative maintenance concepts, best practices, contract strategies, technologies, etc to provide improved services at lower costs. Since the deployment of the NDS systems in the early 1990s, their performance has remained stable in the face of unstable budgets and frequent technology changes within the approximately \$14-15M annual O&M budget. And for the foreseeable future, the technologies currently in use will remain the most cost effective technologies available to provide these services to our customers.